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Zilka-Kotab, PC
P.O. BOX 721120
SAN JOSE, CA 95172-1120

EXAMINER	
PALIWAL, YOGESH	
ART UNIT	**PAPER NUMBER**
2435	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

anita@zilkakotab.com
dottie@zilkakotab.com
jennifer@zilkakotab.com

Office Action Summary	Application No.	Applicant(s)	
	10/674,878	CURRIE ET AL.	
	Examiner	Art Unit	
	YOGESH PALIWAL	2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,9,21,27-30,34,37-40 and 42-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 9, 21, 27-30, 34, and 37-40, and 42-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

- Applicant's amendment filed on 12/3/2009 has been entered. Applicant has amended claims 1, 21, and 42; canceled claim 41 and added claim 46. Currently claims 1, 2, 9, 21, 27-30, 34, and 37-40, and 42-46 are pending in this application.
- Examiner acknowledges clarification of claim language of claim 42 to overcome rejection under 35 U.S.C 112. As a result, all rejections under U.S.C 112 are withdrawn.

Priority

1. This application is filed as a continuation in part (CIP) of application 10/113875.In order for claims in the CIP application (that is continuation-in-part of an earlier U.S. application) to receive the effective filing date of the parent application, claims in the new application must be supported by the specification and claims of the parent application. Examiner, in order to establish effective filling date for claims in this application, reviewed parent application 10/113875 and was not able to find support for both independent claims 1 and 21 of this application in the parent application. For example claims 1 and 21 both requires with other limitations, "wherein when the verification service causes the web page object to have at least one of the first and second contents, the web page object appears invisible to the visitor after it is rendered by the visitor's browser". Examiner was unable to find support for all these limitation in the parent application (10/113875). As a result, examiner asserts that all the

independent claims receive the effective filing date of 09/29/2003, which is a filing date of this application. Since the independent claims aren't fully supported by the parent application, dependent claims which incorporate all the limitations of independent claims also are not fully supported by the parent application. As a result, all the dependent claims also receive the effective filling date of 09/29/2003.

Response to Arguments

2. Applicant's arguments filed 12/3/2009 regarding 35 U.S. C. 101 first paragraph rejection of claims 1, 2, 9, 34, and 37-45 have been fully considered but they are not persuasive for following reasons:

- Applicant argues that, "The Examiner has rejected Claims 1, 2, 9, 34, and 37-45 under 35 U.S.C. 101 as being directed to non-statutory subject matter. Applicant respectfully notes that such rejection is avoided in view of the amendment made to independent Claim 1 hereinabove."
- Examiner respectfully disagrees and would like to point out that requiring verification service to perform its tasks, utilizing a computer does not incorporate the computer into the apparatus, apparatus as claimed still consist of only a web page object and a verification service both of which are software components and therefore, the claimed "apparatus" would amount to computer programs, a type of functional descriptive material, per se

3. Applicant's arguments filed 12/03/2009 have been fully considered but they are not persuasive for the following reasons (**Note:** Examiner would like to point out that

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant simply first recite the claim language and then summarizes what examiner cited as a reference and finally concludes with the statement that merely disclosing what reference teach is not same as what the claim is without providing any arguments in support of such assertion.

- Regarding Claims 1 and 9, applicant argues that, “However, merely using output from a port or vulnerability scanning tool to create an XML document that is parsed to check that the document is valid and well formed, in addition to disclosing a port scanning tool and a back-end database system, as in Blyth, fails to disclose a technique "wherein the scanning engine parses the set of XML files and stores records of the parsed set of XML files in the database in association with an account number of a provider of the online service" (emphasis added), as claimed.”
- Examiner respectfully disagrees and would like to point out that Fig. 1 clearly discloses the scanning engine parsing the set of XML files and storing records of the parsed set of XML files in the database. Furthermore, the argument regarding records are not stored in database in association with an account number of a provider of the online service is also not found persuasive because Fig. 6 clearly discloses the result of the scan includes the URL and an IP address of a provider of the online service both of which can

be interpreted as an account number. Both the URL and an IP address are registered in DNS and are used to identify the online service provider therefore both the URL and IP address can be interpreted as an account number of a provider of the online service. Also see Fig. 2 which discloses Target field in the XML and see, Fig. 5, Which discloses database containing a target field, all the vulnerabilities are stored in association with the target address which in an IP address and URL of the online service for which the scanning is performed.

- Applicant further argues that, “However, merely disclosing a job scheduling module that initiates customer jobs and uses a customer profile to tell a command engine what services a customer should receive, as in Bunker, fails to disclose a technique "wherein the scanning is performed according to a schedule" (emphasis added), as claimed by applicant. Merely disclosing a job scheduling module that initiates customer jobs, as in Bunker, fails to disclose a technique "wherein the scanning is performed according to a schedule" (emphasis added), as specifically claimed by applicant.”
- Examiner respectfully disagrees and would like to point out that Bunker clearly discloses that a scanning is performed according to a schedule. See paragraph 0052, “The **job scheduling module** 202 can initiate customer jobs at any time. **It uses the customer profile 204** information to tell the Command Engine 116 what services the customer should receive, for example, due to having been purchased, so that **the Command Engine 116**

can conduct the appropriate range of tests" and also paragraph 0054 which recites, "The **customer profile 204 may be used by the Command Engine** 114 to **conduct an appropriate set of tests 516** on the **customer's systems** 1002." This part clearly recites command engine uses a customer profile to schedule appropriate range of tests based on what services customers has paid for. Applicant should also not that the set of tests are equivalent to scanning the customers computer network for security vulnerabilities (see, Paragraph 0069, "Figuratively, the Command Engine 116 is the "brain" that orchestrates all of the "basic tests" 516 into the security vulnerability attack simulation used to test the security of customer systems and networks 1002").

- Regarding **Claim 42**, applicant argues that, "Applicant again notes that the above excerpts from Bunker relied on by the Examiner merely disclose a job scheduling module that initiates customer jobs and uses a customer profile to tell a command engine what services a customer should receive, which fails to disclose a technique "wherein the schedule is requested by the customer" (emphasis added), as claimed by applicant. Merely disclosing a customer profile that is used to tell a command engine what services a customer should receive, as in Bunker, fails to disclose that "the schedule is requested by the customer" (emphasis added), as specifically claimed by applicant."
- Once again examiner respectfully disagrees and would like to point out that Bunker discloses the schedule is requested by the customer (see, Paragraph

0052, "The **job scheduling module** 202 can initiate customer jobs at any time. It uses **the customer profile 204 information to tell the Command Engine** 116 what services the customer should receive, for example, due to having been purchased, so that the **Command Engine 116 can conduct the appropriate range of tests 516**." And also paragraph 0054, "Customer Profile information includes that information discussed in this specification which would typically **be provided by the Customer**". Therefore, the tests for vulnerability are scheduled according to the customer profile and the customer profile is provided by the customer therefore, the schedule is requested by the customer. As a result, rejection is maintained.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 2, 9, 34, and 37-40 and 42-46 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites, "An apparatus for providing a security status of an on-line service, comprising: a web page object.....; a verification service.....". The claimed apparatus direct to *software per se*, which do not show the physical transformation. Therefore, the claimed "apparatus" would amount to computer programs, a type of functional descriptive material, per se. As such, the claimed system/apparatus must

include the hardware necessary to realize any of the functionality of the claimed modules and produce a useful, concrete and tangible result. Absent recitation of such hardware as part of the claimed apparatus, it is considered non-statutory.

Claims 2, 9, 34 and 37-40, and 42-46 depend on claim 1, therefore they are rejected with the same rationale applied against claim 1 above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 9, 21, 27-30, 37-39, and 42-45 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Khaishgi et al. (US 6,658,394 B1), hereinafter “Khaishgi” in view of Guirguis (Guirguis, Ragi; “Network- and Host-Based Vulnerability Assessments: An Introduction to a Cost Effective and Easy to Use Strategy”; GIAC Security Essentials (GSEC) Practical, Version 1.4b, Publication Data: June 14th, 2003), hereinafter “Guirguis” and further in view of Tiso (Tiso, John; “Automated Security Scanning”; Sys Admin, Volume 9, Issue 10, Pages 73-78, Publication: October 2000), hereinafter, "Tiso" and Bunker, V et al. (US 2003/0028803), hereinafter “Bunker” and further in view of Blyth (Blyth, Andrew; “An XML-based architecture to perform data integration and data unification in vulnerability assessments”, Information Security Technical Report, Volume 8, Issue 4, April 2003, Pages 14-25), hereinafter “Blyth”.

Regarding **Claims 1 and 21** Khaishgi discloses an apparatus and corresponding method for providing a security status of an on-line service, comprising:

a web page object (Column 1, lines 26-28, "electronic seals") that is automatically rendered by a browser when a visitor uses the browser (Fig. 5, Numerals 52, 54, 56, and 58, and at Column 2, lines 34-44, "browser") to access one or more web pages of the on-line service (Fig. 1, Numeral 4, "Merchant") via a public network (Fig. 1, Numeral 12, "Network"); and

a verification service (Fig. 2, Numeral 8, "Certification Service") that hosts the web page object (Fig. 2, Numeral 22, "Seal Servers") separately from the one or more web pages of the on-line service (Fig. 2, Numeral 4, Merchant's server(s) numeral 4 are separate from the "Seal servers 22" of "Certification Service", also refer to Column 3, lines 14-25), and further controls contents of the web page object, utilizing a computer (Column 3, lines 26-42),

wherein the visitor is not required to take any action other then requesting access to the on-line service via the browser to receive the security status through the automatic rendering of the web page object by the visitor's browser (Column 2, lines 66-67 and Column 3, lines 1-2, "Merchants 4 post their corresponding electronic seals on their web sites or in electronic mail messages (emails) in order to increase the confidence of potential customers", *Note: Since web-page of the merchant contains the link of the seal, the seal is generated and displayed on the web-page when client generates a request for a web-page from a merchant, client will only need to take*

further action (i.e. click on the seal) if client want "more information" about the seal and merchant, refer to Column 3,line 14-25) , and

wherein the verification service causes the contents of the web page object to be changed in accordance with its prior determination of a level of the security status (Column 4, lines 60-67 and Column 5, lines 1-7, "When user 6 accesses a merchant 4, client device 10 is directed to retrieve a seal from seal servers 22. More specifically, seal servers 22 receive a request from computing device 10 that includes a unique identifier for one of the merchants and, therefore, uniquely identifies one of the media objects within seal repository 25 (step 52). Seal servers 22 log the request by storing the IP address within request log 24 (step 54) and select the appropriate media object according to the unique identifier (step 56). "), such that when the verification service determines, in a first verification operation prior to the visitor's access request, that the on-line service has a first level of the security status, it causes the web page object to have first contents (Column 4, lines 60-67 and Column 5, lines 1-7, *Seal server provide the electronic seal corresponding to the merchant to the client*), and when the verification service determines, in a second verification operation prior to the visitor's access request, that the on-line service has a different second level of the security status (Column 4, lines 49-52, "Next, seal maintenance modules 27 periodically regenerate the media objects in order to update the embedded information including the expiration date (Step 48).") , it causes the web page object to have different security status levels via the browser's automatic rendering of the prior-determined and changed web page object contents when the visitor requests access to the on-line service

(Column 4, lines 52-54, "For example, a new set of media object can be generated daily in order to facilitate detection of expired seals"), and

wherein the first and second verification operations to determine the on-line service's security status and control the contents of the web page object are performed by the verification service prior to and completely independently from the visitor's request to access the on-line service, and independently from any action by the visitor and visitor's browser (Column 4, lines 28-57, *Note: Both the seal generation and maintenance are done by certification service and these steps are done completely independently from the visitor's request to access the on-line service, i.e. visitor's request to access the on-line service does not trigger initial seal request operation from merchant (fig.3) or the maintenance which can be done daily*) , and

wherein when the verification service causes the web page object to have at least one of the first and second contents, the web page object appears invisible to the visitor after it is rendered by the visitor's browser (Column 4, lines 54-57, "In one configuration, seal issuer 8 generated a media object having a transparent image when the corresponding merchant 4 loses its certification status, In this manner, the seal "disappears" from the merchant web site").

Khaishgi discloses changing the seal in response to detecting expiration of the seal (Column 4, lines 54-57). Khaishgi does not explicitly disclose:

wherein the levels of the security status displayed for the visitor via the automatic rendering of the web page object indicate how vulnerable devices and services of the on-line service are to hackers and other online security threats as determined by the

first and second verification operations; wherein at least one of the first and second verification operations includes scanning the on-line service from a remote address on the network and wherein the scanning produces a set of XML files including information about open ports, available service, network protocols, security exposures and vulnerabilities associated with a device providing the on-line service and wherein a scan header record associated with the scanning is stored in a database.

Guirguis discloses a system (nessus engine) which detects how vulnerable devices and services of the on-line service are to hackers and other online security threats as determined by a verification operation (see, Page 2, 2nd Paragraph, "Vulnerability assessments identify and suggest fixes for possible vulnerabilities that attackers might exploit in operating systems or in mail, HTTP, and FTP servers.") and wherein at least one of the first and second verification operations includes scanning the on-line service from a remote address on the network (See Page 5, Section 3.1.3) and wherein the scanning produces a set of XML files including information about open ports, available service, security exposures and vulnerabilities, the information associated with a device providing the on-line service (see, Page 2, 2nd paragraph and Page 6, Section 3.1.4) wherein a scan header record associated with the scanning is stored in a database (see, Page 6, 2nd Paragraph).

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to scan the online services of Khaishgi from a remote location for vulnerabilities as taught by Guirguis because "*performing VAs on company systems provide three key pieces of information necessary for improving their security: 1) it is*

easier to locate which systems are vulnerable, 2) it identifies what services/components are vulnerable, and 3) it suggests the best method for repairing the vulnerabilities (i.e. – it recommends which patch or software version should be used/applied). Performing this procedure on a regular basis allows IT professionals to find and repair possible security vulnerabilities before attackers find and exploit them." (See, page 2, 2nd paragraph).

The combination of Khaishgi and Guirguis further discloses the scan header record including a number of vulnerabilities classified by severity level (see, Guirguis, Page 6, 1st paragraph) and the combination further discloses wherein the scanning is performed using a scanning engine of the verification service (see, Guirguis, Page 5, section 3.1.2).

The combination of Khaishgi and Guirguis does not explicitly disclose the scan header record including a date, launch time, and duration.

However, Tiso discloses generating a scan report including date, launch time and duration (see, Page 74, Table 1).

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to add, in the scan report of the combination of Khaishgi and Guirguis, data launch time and duration of the scan as taught by Tiso so that reviewer of the report can simply look at the summery to get some overview about the scan results.

The combination of Khaishgi, Guirguis and Tiso does not disclose wherein at least one of the first and second verification operations include determining the security

status by comparing a fingerprint of a new vulnerability to a stored list of the devices and services and without performing an actual scan or test of the devices and services.

However, Bunker discloses determining the security status by comparing a fingerprint of a new vulnerability to a stored list of the devices and services and without performing an actual scan or test of the devices and services (paragraph 0019 line 11-14, "The configuration of the new vulnerability may be compared to the customer's system network configuration in the last test for the customer. ")

Therefore, It would have been obvious at the time the invention was made to one of ordinary skill in the art further modify the virus scanner of the combined system of Khaishgi, Guirguis and Tiso to send alert based on information in the stored profile and newly received vulnerability information without requiring a new scan, as taught by Bunker so "only customers affected by the new security vulnerabilities may receive the alert" (paragraph 0020 lines 1-2) also this kind of configuration provides real time security alerts that warns operators to perform appropriate action when new newly received security vulnerability can potentially harm their system.

The combination of Khaishgi, Guirguis, Tiso and Bunker discloses XML file information about open ports, available service, security exposures and vulnerabilities, the information associated with a device providing the on-line service but does not explicitly disclose XML file including information about a network protocol, the information associated with a device providing the on-line service and wherein the scanning engine parses the set of XML files and stores records of the parsed set of XML files in the database in association with an account number of a provider of the

online service and wherein the database stores the information about generic services expected to be running on the open ports.

However, Blyth discloses XML file including information about a network protocol, the information associated with a device providing the on-line service (see, Fig. 7, "servicename = SSH" "servicename = "smtp") and wherein scanning engine parses the set of XML files and stores records of the parsed set of XML files in the database in association with an account number of a provider of the online service (see, Page 16, 1st paragraph, Fig. 1 and also Fig. 6).

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to parse, the set of XML files produced by the combination of Khaishgi, Guirguis, Tiso and Bunker, in the database as taught by Blyth so that "large quantities of security-related information can be captured within a single database schema" (see, Blyth, Abstract).

The combination of Khaishgi, Guirguis, Tiso, Bunker and Blith further discloses wherein the database stores the information about generic services expected to be running on the open ports (see, Blith, Page 17, 1st paragraph, "the name of the service that is normally associated with that port number").

The scanning system of Guirguis does not explicitly disclose that the scanning is performed according to a schedule. However, Bunker further discloses wherein the apparatus is operable such that the scanning is performed according to a schedule (See paragraph 0052, "The **job scheduling module** 202 can initiate customer jobs at any time. **It uses the customer profile 204** information to tell the Command Engine 116

what services the customer should receive, for example, due to having been purchased, so that **the Command Engine 116 can conduct the appropriate range of tests**" and also paragraph 0054 which recites, "The **customer profile 204 may be used by the Command Engine** 114 to **conduct an appropriate set of tests 516** on the **customer's systems** 1002." This part clearly recites command engine uses a customer profile to schedule appropriate range of tests based on what services customers has paid for. Applicant should also not that the set of tests are equivalent to scanning the customers computer network for security vulnerabilities. see, Paragraph 0069, "Figuratively, the Command Engine 116 is the "brain" that orchestrates all of the "basic tests" 516 into the security vulnerability attack simulation used to test the security of customer systems and networks 1002").

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to schedule, the scanning of the combined system, performed according to a schedule as taught by Bunker to automate the task of triggering a network scan and using the scheduling so that the command engine can conduct the appropriate range of tests (security scan). (See, Bunker, Paragraph 0052).

Regarding **Claims 2 and 27**, rejections of claims 1 and 21 are incorporated the combination of Khaishgi, Guirguis, Tiso, Bunker and Blith further discloses wherein the on-line service comprises devices and services (Fig. 1, Numeral 4, representing web-servers of Merchant 4) and verification service determines the security status level of the on-line service (Column 2, lines 44-46, "Seal issuer 8 verifies the credentials, policies or business practices of each Merchant 4 and issues a corresponding seal of

certification to each merchant 4 upon verification.") by evaluating vulnerability scan of the devices and services comprising the on-line service (see Guirguis, Page 6, Section 3.1.4)

Regarding **Claims 9 and 28**, rejections of claims 2 and 27 are incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blith further discloses verification service periodically receives result of a new vulnerability scan of the devices and services comprising the on-line service and causes the contents of the web page object to be changed it a changed security status level is determined, thereby automatically providing the visitor with an updated security status (see Guirguis, Page 5, Section 3.1.3, and Khaishgi, Column 4, lines 49-57)

Regarding **Claim 29,** the rejection of claim 21 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blith further discloses the web page object comprises an image and an associated URL (Column 3, lines 28-31, "Each media object contains media, such as image data, video data, and audio data, that merchant 4 presents as an electronic seal of certification." and also at Column 3, lines 58-67, URL for the seal).

Regarding **Claim 30**, the rejection of claim 21 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blith further discloses the web page object comprises a graphical file whose contents are periodically updated in accordance with a periodically determined security status level (Column 3, lines 28-31, "Each media object contains media, such as image data, video data, and audio data, that merchant 4 presents as an electronic seal of certification." and at Column 4, lines

49-57, "Next, seal maintenance modules 27 periodically regenerate the media objects in order to update the embedded information including the expiration date (step 48). For example, a new set of media objects can be generated daily in order to facilitate detection of expired seals.")

Regarding **Claim 37**, the rejection of claim 36 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blyth further discloses the records include a detail record for each positive test result associated with the scanning (see, Blyth, Fig. 11).

Regarding **Claim 38**, the rejection of claim 1 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blyth further discloses wherein the visitor is allowed to log in and review interactive reports associated with the scanning (see, Khaishgi Fig. 6 for user requesting the merchant information combined with Guirguis, Page 6, Section 3.1.4).

Regarding **Claim 39**, the rejection of claim 1 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blyth further discloses wherein the levels of security status displayed for the visitor includes a security meter (see, Khaishgi, Fig. 6 combined with Guirguis, Page 6, Section 3.1.4).

Regarding **Claim 42**, the rejection of claim 1 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blyth further discloses wherein the scanning is performed according to a schedule and is requested by a customer (see, Bunker, Paragraph 0052, "The **job scheduling module** 202 can initiate customer jobs at any time. It uses **the customer profile 204 information to tell the Command Engine** 116

what services the customer should receive, for example, due to having been purchased, so that the **Command Engine 116 can conduct the appropriate range of tests 516**." And also paragraph 0054, "Customer Profile information includes that information discussed in this specification which would typically **be provided by the Customer**". Therefore, the tests for vulnerability are scheduled according to the customer profile and the customer profile is provided by the customer therefore, the schedule is requested by the customer).

Regarding **Claim 43**, the rejection of claim 1 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blyth further discloses wherein the information in the database is initialized manually (see, Khaishgi, Column 4, lines 32-34 describing manual registration process).

Regarding **Claim 44**, the rejection of claim 43 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blyth further discloses wherein the information in the database is initialized automatically (see, Khaishgi, Column 4, lines 32-34, describing automatic registration process).

Regarding **Claim 45**, the rejection of claim 1 is incorporated and the combination of Khaishgi, Guirguis, Tiso, Bunker and Blyth further discloses wherein the scanning is performed on each device registered by the on-line service in the database (see, Bunker, Paragraphs 0052-0054).

Claim 34 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Khaishgi in view of Guirguis, Tiso, Bunker and Blyth and further in view of Nessus Scan

Report (retrieved from:

http://web.archive.org/web/20001217231600/www.nessus.org/demo/report.txt,

Publication: 2000), hereinafter "Nessus Scan Report".

Regarding **Claim 34**, the rejection of claim 1 is incorporated and the combination of Khaishgi, Guirguis, Tiso and Bunker further discloses the database stores the information about the open ports on the device providing the online services (see Page 6, 1st paragraph).

The combination does not however explicitly discloses including in the report actual services running on the open ports, including a Version and network message protocol associated with the actual services.

However, Nessus Scan Report discloses a report that includes actual services running on the open ports, including a Version and network message protocol associated with the actual services (see, Nessus Scan Report, "Information found on port ftp (21/tcp) bonsai microsoft ftp service (version 4.0). 500 'get / http/1.0': command not understood").

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to add, in the scan report of the combined system of Khaishgi, Guirguis, Tiso and Bunker, information actual services running on the open ports, including a Version and network message protocol associated with the actual services so that the administrator of the web server can identify vulnerabilities within open ports and resolve them efficiently.

Claim 40 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Khaishgi in view of Guirguis, Tiso, Bunker, Blith and further in view of Nyanchama et al. (US 2003/0154269 A1), hereinafter "Nyanchama".

Regarding **Claim 40**, the rejection of claim 1 is incorporated and the combination of Khaishgi, Guirguis, Tiso, and Bunker does not explicitly disclose wherein the levels of the security Status displayed for the visitor include an overall numeric rating.

However, Nyanchama discloses displaying the levels of security status that include an overall numeric rating (see Paragraph 0031).

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to include, in the security status report of the combined system of Khaishgi, Guirguis, Tiso and Bunker, an overall numeric rating as taught by Nyanchama because that provides "automated assessment and quantification of, or security risks associated with, the vulnerabilities of computer network" (see, Nyanchama, Paragraph 0001).

Claim 46 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Khaishgi in view of Guirguis, Tiso, Bunker and Blyth and further in view of Lloyd et al. (US 2002/0129161 A1), hereinafter, "Lloyd".

Regarding **Claim 46**, the rejection of claim 1 is incorporated and the Khaishgi discloses transparent image as a seal for expired seal however, Khaishgi further discloses the web page object appears invisible to the visitor after it is rendered by the visitor's browser due to a transparent image being provided to the visitor for display on the visitor's browser (see, Khaishgi, Column 4, lines 54-57).

Khaishgi does not explicitly use single dot GIF image to get the transparent image.

Lloyd discloses using a single dot GIF image to make the image imperceptible (see, Paragraph 0013, “In some embodiments, the webby is designed to be imperceptible. In a non-limiting implementation of the webby, the content object may comprise a transparent GIF or JPEG, which includes one or more pixels.”).

Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to use a single dot GIF image, in the system of Khaishgi, as taught by Lloyd to make the seal of Khaishgi invisible so that seal disappears from the merchant web site when merchant loses its certification status (see, Khaishgi, Column 4, line 54-57).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOGESH PALIWAL whose telephone number is (571)270-1807. The examiner can normally be reached on M-F: 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. P./
Examiner, Art Unit 2435

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435